

12-17-91  
12.3.8 v.6

# Laucks <sup>84 years</sup>

## Testing Laboratories, Inc.

940 South Harney St., Seattle, WA 98108 (206) 767-5060 FAX 767-5063

Chemistry Microbiology and Technical Services

CLIENT: Ash Grove Cement West  
3801 East Marginal Way South  
Seattle, WA 98134

ATTN : Nathan A. Fernow, QC Director

Work ID : -  
Taken By : Client  
Transported by: Hand Delivered  
Type : Sediment

### Certificate of Analysis

Work Order# : 91-12-879  
DATE RECEIVED : 12/17/91  
DATE OF REPORT: 01/13/92  
CLIENT JOB ID : S-1599

### SAMPLE IDENTIFICATION:

	Sample Description	Collection Date
01	Plant Pond Sediment #1	12/12/91

Samples were analyzed for total recoverable metals.

### ATTACHMENTS:

Following presentation of sample results, the following appendices are attached to this report:

Appendix A: Method Blank Report  
Appendix B: Matrix Spike/Matrix Spike Duplicate Report

Unless otherwise instructed all samples will be discarded on 02/14/92

Respectfully submitted,  
Laucks Testing Laboratories, Inc.

*J.M. Owens*  
J. M. Owens

USEPA SF



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AGC2H000648

# Laucks <sup>84</sup> years

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Chemistry, Microbiology, and Technical Services

CLIENT : Ash Grove Cement West

Certificate of Analysis

Work Order # 91-12-879

### TESTS PERFORMED AND RESULTS:

Analyte	Units	01
Arsenic (Method 7061)	mg/kg DB	78.
Cadmium (Method 6010)	mg/kg DB	5.
Chromium (Method 6010)	mg/kg DB	64.
Copper (Method 6010)	mg/kg DB	110.
Lead (Method 6010)	mg/kg DB	710.
Nickel (Method 6010)	mg/kg DB	32.
Total Solids	%	31.4
Zinc (Method 6010)	mg/kg DB	450.



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AGC2H000649

# Laucks <sup>84</sup><sub>years</sub>

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### APPENDIX A

#### Method Blank Report



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## Testing Laboratories, Inc.

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Chemistry, Microbiology and Technical Services

### Quality Control Report MS/MSD Report for Work Order 9112879

MS/MSD Name	Sample Fractions Verified	MS/MSD Sample	Analyte	Percent Recovery		Cont. Limits		
				MS	MSD	RPD	LCL	UCL
K122491_ICPS01	1	9112879-01	Cadmium	95	95	0	60	117
			Chromium	91	91	0	50	142
			Copper	90	90	0	52	129
			Lead	90	86	5	75	125
			Nickel	96	95	1	58	124
			Zinc	94	93	1	50	150
K122791_HYS01	1	9112879-01	Arsenic	99	84	16	50	150

\* = Value Exceeds Control Limit

RPD = Relative Percent Difference

LCL = Lower Control Limit

UCL = Upper Control Limit

-1 for recovery value indicates that recovery could not be calculated

An MS/MSD pair can validate the results for more than one work order. For this reason, results for analytes

not requested on this work order may appear in this MS/MSD report.

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APPENDIX B

Matrix Spike/Matrix Spike Duplicate Report



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## Testing Laboratories, Inc.

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Chemistry, Microbiology and Technical Services

### Quality Control Report Method Blanks for Work Order 9112879

Blank Name	Samples Verified	Test Description	Result	Control	
				Units	Limit
8122491_ICP_S01	1	Cadmium	0.50 U	mg/kg DB	1.0
		Chromium	1.0 U	mg/kg DB	2.0
		Copper	1.0 U	mg/kg DB	2.0
		Nickel	2.0 U	mg/kg DB	4.0
		Lead	10 U	mg/kg DB	20
		Zinc	1.0 U	mg/kg DB	5.0
8122791_HY_S01	1	Arsenic	0.50 U	mg/kg DB	1.0

Method blank results for multi-analyte tests appear directly after this report.

A method blank can validate more than one analyte on more than one work order. The method blanks in this report may validate analytes not determined on this work order, but nonetheless determined in the associated blank.

Because they validate more than one work order, method blank results are not always reported in the same concentration units used for sample results.



#### blank exceeds control limit

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## Testing Laboratories, Inc.

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## Certificate

Chemistry, Microbiology, and Technical Services

CLIENT: Ash Grove Cement  
3801 E. Marginal Way S.  
Seattle, WA 98134  
ATTN: Nate Fernow

LABORATORY NO: 99458

DATE: Nov. 14, 1986

PO# S-3463

REPORT ON: ASH/WATER

### SAMPLE

IDENTIFICATION: Submitted 10/22/86 and identified as shown below:

- 1) 10/13/86 Ash Grove Cement West Soil A (ash) Pond Sediment
- 2) Water sample Pond Water

### TESTS PERFORMED AND RESULTS:

	<u>1</u>	<u>2</u>
	<u>g</u>	<u>mg/L</u>
Total Organic Carbon	7.6	30.
Total Arsenic	---	L/0.2
Total Barium	---	0.4
Total Cadmium	---	L/0.01
Total Chromium	---	L/0.1
Total Lead	---	0.1
Total Mercury	---	L/0.005
Total Selenium	---	L/0.2
Total Silver	---	L/0.1

Sample 1 was analyzed for E.P. Toxicity in accordance with Test Methods for Evaluating Solid Wastes, (SW 846), U.S.E.P.A., July, 1982. Extraction was performed using Method 1310. Mercury was determined using a 7000 series method; other metals performed by ICAP, Method 6010.



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Certificate

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PAGE: 2

Ash Grove Cement

LABORATORY NO: 99458

EP Total

TCLP

	<u>parts per million (mg/L)</u>	
	<u>1</u>	<u>MCL</u>
Arsenic	L/0.2	5.0
Barium	0.5	100.
Cadmium	0.06	1.0
Chromium	L/0.1	5.0
Lead	0.4	5.0
Mercury	L/0.005	0.2
Selenium	L/0.2	1.0
Silver	L/0.1	5.0

## Key

MCL = Maximum Contamination Level allowed per regulation.

L/ = Less than

Respectfully submitted,

Laucks Testing Laboratories, Inc.

*J. M. Owens*

J. M. Owens

JMO:dr



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